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Article

Competence of the Distance-Learning Portal 'Darsak' with Jordan's K-12 Curriculum/University Education

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Abstract

Curriculum development is the fundamental component of high-quality education, particularly in primary and secondary school education during Covid-19, which requires modern researchers' attention. Thus, the current research explores the impact of distance learning, student interest, and teachers' abilities on curriculum creation in Jordanian elementary and secondary schools. Additionally, the present study examines the moderating effect of institutional support on the relationship between remote learning, student interest, teacher abilities, and curriculum development in Jordanian K-12 schools. The researchers gathered primary data via surveys and evaluated it with smart-PLS. The findings established a positive correlation between distance learning, student interest, teachers' abilities, and curriculum development. The results also reveal that institutional support considerably modifies the relationship between distance learning, student interest, teacher abilities, and curriculum development in Jordanian K-12 schools. This research serves as a guide for legislators as they draught regulations governing curricular development.

Keywords

Distance learning, student interest, teachers' abilities, curriculum development, institutional support

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Distance learning is a style of education where the teacher and student are separated physically or technologically. Distance learning does not imply an entirely remote mode of instruction. It is usually combined with full-time activities that require attendance in class. However, as technology advances, this need may now be met online. Since its debut, distance learning has been actively integrated into practically every country's education system (Igwe et al., 2022; Lubiński & Tama, 2021). Distance learning-enabled education to be offered to groups of persons who, for obvious reasons, were unable to attend full-time classes: students with disabilities, students with health problems, and students who lived too far from school to attend regularly. However, the number of programmes available was limited, and there was no framework to guide the process. Distance learning is not the only choice for certain groups of students. When a student is uneasy with group classes, online learning can assist boost motivation and performance. Students' desire to communicate with their teachers impacts the new curriculum's framework (Soulsby et al., 2022; Utama, 2021).

Curriculum creation is a critical aspect of distance education. Although this topic has been extensively investigated (Igwe et al., 2022; Soulsby et al., 2022), it still needs to be addressed in light of its importance and growing demand with time. Curriculum development is influenced by various elements such as students, teachers, and institutions. Often, it is seen that curriculum creation affects distance learning, as the involvement of teachers and students is significant. The purpose of this study was to examine curriculum development from three perspectives: distance education, student interests, and instructor abilities, as well as institutional support. As is customary in distant education, the curriculum is changed. Distance education and curriculum development are inextricably linked (Istaryaningtyas et al., 2021; Roberts et al., 2018). On the other hand, additional elements, such as student interests and teacher talents, contribute to the organization's decision to alter the curriculum. From the student's perspective, there are two possible motivations for curriculum changes. 1) either the curriculum does not meet the educational requirements of the current era, or 2) the students are having difficulty comprehending the chosen curriculum. In the case of comprehension, there are a few more reasons: 1) teachers are not delivering the curriculum according to the students' knowledge and requirements, or 2) teachers are not experts in that subject (coaching as a part-time teacher). Another aspect affecting curriculum creation is institutional support, mainly because intuition frequently does not respond to students' needs. Another element to consider in this context is when an institution fails to modernise its system following current requirements. Keeping these aspects in mind, the current study sought to test them.

Jordan's Education Sector

Jordan is in the Middle East and shares borders with Syria, Saudi Arabia, and the Dead Sea, among other countries. Since the mid-1990s, Jordan's education system has been progressively improving. Jordan's Ministry of Education is responsible for education at all levels, including pre-primary, primary, and secondary. The Ministry of Higher Education and Scientific Research (MoHESR) is responsible for Jordan's higher education system (Al-Hassan, 2018; Chinnery, 2019). Jordan's educational system is divided into four cycles. 1) two-year pre-primary education: In Jordan, pre-primary education is provided through kindergartens and nursery schools. This level of education is optional. In Jordan, kindergartens are primarily run by non-governmental and private organisations. This educational level fosters an optimum learning environment and contributes to the learners' overall growth. This level promotes the development of children's personalities. 2) ten-year primary education: All people are expected to complete a ten-year primary education in Jordan. This educational level instills foundational skills and knowledge, laying the groundwork for lifelong learning. Students are taught basic numeracy, language, and science skills at the elementary level. The Arabic language and the history of the Islamic and Arab worlds is taught. Additionally, environmental, social, and aesthetic data are accessible. This level encompasses most curriculum studies conducted on a global scale. 3) two-year secondary education: Secondary education is optional in Jordan and lasts two years. Students who have completed primary school are eligible to

enrol in secondary school. This stage of education prepares students for further study or employment, and 4) the final stage of education is higher education. As school education covers the fundamental level of education for children, the current study will focus on Jordanian school education, which encompasses the first three stages of education. Jordan has 2787 public schools and 1493 private schools. Teachers at various levels in Jordanian schools are depicted in Figure 1:

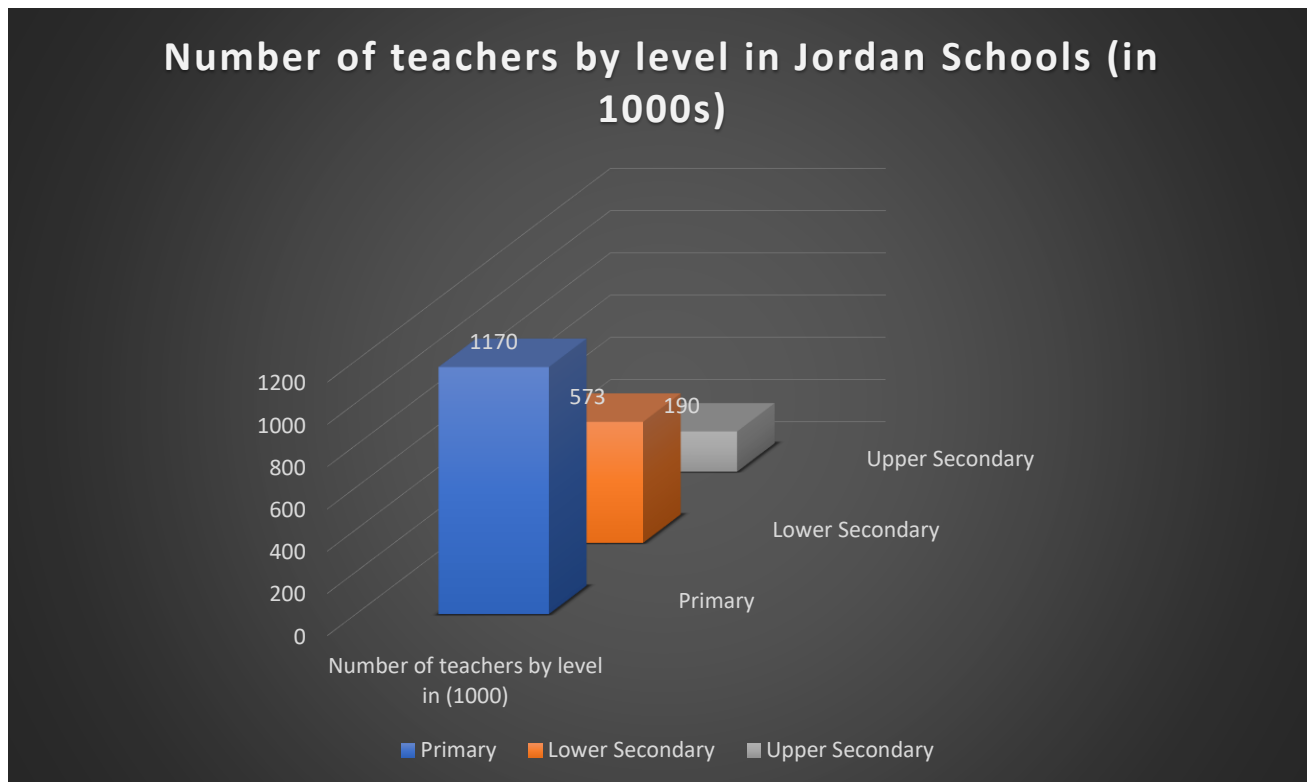


Figure 1: Number of teachers by school level in Jordan

Significance, Study Gaps and Contributions

The current study will address several gaps in the literature, including the following:

- 1) Curriculum development is regarded critical for distant learning, even though it has been extensively investigated but has not yet achieved its peak in Jordan's perspective.
- 2) Kanbul et al. (2020) investigated faculty perceptions of course development in remote learning, whereas the current study will explore curriculum development from the perspective of students and teachers.
- 3) Douce (2021) examined distance learning from language learning, whereas the current study would examine it from the perspective of curriculum building.
- 4) The purpose of this study is to uncover the hidden benefits of distant learning, particularly in terms of curriculum development.
- 5) The proposed model of remote education, student motivation, teacher talents, institutional support, and curriculum creation has not been tested in Jordan previously. The current study will also contribute to the literature in the following ways:
 - 1) it will emphasise the importance of curriculum development in distance learning from a Jordanian perspective.
 - 2) it will emphasise the importance of institutional support in advancing distance learning; and
 - 3) it will assist policymakers in formulating and implementing a better policy for curriculum development in distance learning in Jordan.

The current study's structure is further subdivided into distinct phases. The study's inception was discussed in the first phase. Considering previous research, the second phase will explore the evidence for remote learning, student interest, teacher abilities, institutional support, and curriculum development. The third phase will examine and assess the methods for collecting data on distance learning, student engagement, teacher abilities, institutional support, and curriculum development. The fourth phase will reveal the study's conclusions based on the research completed thus far and will include approval of the results. The article will conclude with the study's implications, conclusion, and final recommendations.

Literature Review

The globe has overcome educational barriers that education ministries view as significant restraints. Curriculum development is the fundamental component of high-quality education, particularly in primary and secondary school education during Covid-19, which requires modern researchers' attention. Thus, the current study evaluates the impact of distance learning, student engagement, and teachers' abilities on curriculum creation in Jordanian elementary and secondary schools. The following research has been conducted on the understudy variable:

Distance Learning and Curriculum Development

Distance learning is widely used in education sectors as a means of curriculum improvement, particularly in Jordan's K-12 institutions. [Aristeidou and Cross \(2021\)](#) investigated disruptive distant learning and its effect on students' university habits in terms of social, assessment, and learning activities. The logistic regression model demonstrated a strongly favourable impact of distant education on students and curriculum development. This breakthrough has enabled students and teachers to avoid physical encounters and attendance due to Covid-19's terrible existence. With the previous in mind, [Bell et al. \(2017\)](#) investigated the relationship between remote learning and teachers' diverse experience sustainability. In conjunction with its associated characteristics of distance learning and the adaptability of the learning process enabled by technology, distance learning has a favourable effect on the development of educational curricula. Digital innovation and various other factors have facilitated distance learning in Jordanian K-12 schools, which has a direct impact on curriculum development ([Bursali & Misir, 2021](#); [Xiu & Ibrahim, 2021](#)). Typically, curriculum development involves the addition of numerous new disciplines, which may disturb students' mental and cognitive abilities. Thus, [Roberts et al. \(2018\)](#) studied various vistas and depths of distant learning and open learning with new disciplines to assist in curriculum development. Numerous statistical tools and methodologies augmented and supported the idea of distance learning to increase students' capacities for the benefit of the educational curriculum ([Alkhaldi, 2021](#); [Lustyantie & Kasan, 2021](#)). As a result, distance education with motivated and educated teachers has enriched our era. Distant education's primary objective and goal is to overcome temporal and geographical barriers. [Bens et al. \(2021\)](#) examined the major development of educational curricula concerning the limiting and enabling elements of distant learning in this context. The wisdom of distance learning is that it develops capacity via significant and purposeful change and curriculum development.

Additionally, it affects curriculum creation by including material and the conceptualization of knowledge by students. Students are developing favourably, and their rapid growth due to creative education has a substantial impact on curriculum development. The current study has generated the following hypotheses:

H1: *Distance learning significantly influences curriculum development.*

Student Interest and Curriculum Development

Distance learning is widely employed in education sectors, particularly in Jordan's K-12 schools, as a means of curriculum enhancement. [Aristeidou and Cross \(2021\)](#) examined the influence of disruptive distant

learning on students' university habits in terms of social, assessment, and learning activities. The logistic regression model indicated that distance education significantly influences both students and curriculum development. This development has assisted students and teachers in avoiding physical confrontations and absences as a result of Covid-19's heinous existence. [Bell et al. \(2017\)](#) explored the relationship between distance learning and the sustainability of teachers' diversified experience considering those mentioned above. When combined with its related characteristics and the adaptability of the learning process facilitated by technology, distance learning has a beneficial effect on the development of educational curricula. In Jordanian K-12 schools, digital innovation and a range of other variables have facilitated distant learning, which directly impacts curriculum development ([Dieu, 2021](#); [Mazur, 2021](#)). Curriculum development typically entails the addition of multiple new disciplines, which might have a detrimental effect on students' mental and cognitive capacities. Thus, [Roberts et al. \(2018\)](#) investigated the breadth and depth of distant learning and open learning with new disciplines to aid in curriculum building. Numerous statistical tools and methodologies augmented and substantiated the concept of distance learning to enhance students' skills in service of the educational curriculum. As a result, distance education with motivated and educated teachers has contributed to the enrichment of our period. Distance education's fundamental objective and goal is to overcome temporal and geographical constraints. In this regard, [Bens et al. \(2021\)](#) evaluated the significant growth of the educational curriculum in connection to the restricting and enabling factors of distance learning. Distance learning is wise because it builds capacity via significant and purposeful change and curriculum improvement.

Additionally, it affects curriculum development by influencing the inclusion of material and the way students conceptualise knowledge. Students are growing in a positive direction, and their rapid development due to creative education has a significant impact on curriculum development. The following hypotheses have been generated because of this study:

H2: *Student interest significantly influences curriculum development.*

Teachers' Ability and Curriculum Development

The changing world has ushered in numerous educational advancements that have altered teacher abilities and curriculum development. Within the curriculum creation process, teacher competence plays a critical role in assisting students in Jordanian K-12 schools in engaging in innovation and digital learning. Thus, [Weiland et al. \(2019\)](#) demonstrated that matching diverse scenarios to teachers' talents results in establishing an educational programme with acceptable proportions. The quantitative exploratory study revealed that instructors' ability to identify problematic situations that may benefit curricular development are confident and visible. Numerous new disciplines should be added to the curriculum, which might also help teachers develop their competencies.

Similarly, [Missenden and Campbell \(2019\)](#) highlighted secondary school instructors' skills to differentiate between various student issues and anxiety that can be alleviated by curricular improvement. Correlation coefficients demonstrated that teacher talents have a significant and statistically significant impact on curriculum creation. Because of educational experiments and simulations, the interaction between teachers and students is visible. These pedagogical integrations are predicated on the teacher's abilities, which are cultivated through patience and inventive thinking during the curriculum creation process. Keeping the preceding in mind, [Iwuanyanwu and Ogguniyi \(2020\)](#) underlined the importance of instructor abilities in resolving all facets of mathematical and strategic challenges that could impair student abilities. As a result, the two instructional strategies increased teachers' efficacy in enhancing the educational curriculum's development ([Kiraci & Canan, 2021](#); [Nguyen et al., 2021](#)). Proper team management by teachers influenced curriculum creation. This was accomplished through the considerable organisation of leadership and communication. [Garraway \(2017\)](#) examined curriculum creation in this framework, focusing on future-oriented approaches combined with teacher

competencies. Diverse parts of teacher scripting provide critical knowledge for curricular creation. Strong knowledge is essential for establishing and sustaining the introduction of new subjects into the curriculum. Teacher talents are interconnected with a wide variety of skills and abilities, each of which has many matching elements. These relevant elements are based on problem-solving skills and sound analytical techniques, which have an impact on the construction of curricula, and the study's hypothesis is as follows:

H3: *Teachers' ability significantly influences curriculum development.*

Moderating Impact of Institutional Support

Institutional support has become increasingly evident over the last few decades for the efficient curriculum and online learning. Jordanian elementary and secondary schools have also recognised the services, degree planning, early alerts, and advising that assist student in reaching their academic goals. Similarly, [Roland \(2021\)](#) examined the institutional support's supremacy and the distinctive ways it fosters among university students and faculty, impacting curriculum development. By modulating the impact of institutional assistance, we can positively investigate barriers and opportunities. Throughout the devastating effect of Covid-19, institutional support gave numerous opportunities for students and teachers to obtain an education efficiently and affordably. [Dash \(2018\)](#) examined the incentive of social work and education among students through distant and open learning, which addresses issues and possibilities. The findings imply that institutional support for distance learning and curriculum development is beneficial in bridging and reducing educational gaps. For example, [Ten Cate et al. \(2018\)](#) investigated the development and implementation of educational curricula with institutional support and distance learning. Among the examinations of educational curricula, institutional support is examined for its moderating effect on distant learning. The offered competent staff and professors demonstrate the moderating effect of institutional support on curriculum development and distance learning. Institutional support aided distance learning students in providing feedback and expertise about programme enhancements.

Additionally, [Gorski and Parekh \(2020\)](#) examined the relationship between perceptions of institutional support, social justice education, and transformational teaching. The multicultural assistance provided by institutions plays a significant role in developing educational curricula through distance learning. Distance learning has been expanded to include primary education and pre-primary education in several Jordanian K-12 education systems through the moderating effect of institutional support. While compulsory education is required of all Jordanian students, remote learning has explored numerous effective programmes that have aided in developing a more effective curriculum.

H4: *Institutional Support significantly moderates the relationship between distance learning and curriculum development.*

Institutional support for effective curriculum development and online learning has grown increasingly apparent over the previous few decades. Jordanian elementary and secondary schools have also recognised the degree planning, early alerts, and advising services that aid students in achieving their academic goals. [Roland \(2021\)](#) explored institutional support's supremacy and the specific ways it creates relationships between university students and faculty, hence influencing curricular development. We can positively investigate constraints and opportunities by modifying the influence of institutional aid. Throughout Covid-19's devastation, institutional support provided several options for students and instructors to receive an education efficiently and affordably. [Dash \(2018\)](#) investigated the motivation for social work and education among students via distance, and open learning, which is evident in the way challenges and possibilities are addressed. The findings imply that institutional support for distance learning and curriculum development is advantageous for closing educational disparities and bridging them. For instance, [Ten Cate et al. \(2018\)](#) examined the creation and implementation of

the educational curriculum with institutional support and distance learning. The moderating effect of institutional support on distance learning is investigated among the evaluations of educational curricula. The available qualified personnel and professors indicate how institutional support moderate's curriculum development and distance learning. Institutional assistance supported students enrolled in distance learning in providing input and knowledge for programme enhancements. [Gorski and Parekh \(2020\)](#) also investigated the relationship between institutional support perceptions, social justice education, and transformative teaching. Institutional multicultural aid is critical in constructing an educational curriculum for online learning. Through the moderating influence of institutional support, distance learning has expanded to encompass basic education and pre-primary education in many Jordanian K-12 education systems. While all Jordanian students are required to attend compulsory school, remote learning has investigated various effective programmes that have contributed to developing a more effective curriculum.

H5: *Institutional Support significantly moderates the relationship between student interest and curriculum development.*

Institutional support dynamics affect the interaction between teacher capabilities and curricular development. Teachers' talents are deemed critical owing to the skills and information they possess and their leadership in developing the educational curriculum. [Giraldo-García et al. \(2019\)](#) examined culture's institutional support and interaction in building teaching talents. Empowering and rehabilitating teachers are key components of building educational curricula with institutional assistance. Educational leadership abilities are related to teachers' capacity to include diverse mental settings into curriculum development. With this in mind, [Lytzerinou and Jordanou \(2020\)](#) evaluated teachers' skills to address the arguments and restrictions that arise throughout students' growth of self-efficacy. Thus, scientific methodologies elucidated significant teaching findings, talents, demonstrating their efficacy in building educational curricula. The primary issues that develop during the integration and implementation of educational curricula are typically resolved through the positive inclusion of institutional support. As a result, [Hairon et al. \(2018\)](#) investigated Singapore's curriculums according to the levels of schools, which require both teaching abilities and institutional support. Educational policymakers could also play an encouraging role by enhancing teacher capabilities and providing institutional support to create educational curricula. Institutional support moderates' teachers' skills to resolve conflicts between educational curricula and teaching talents. Thus, with the significant assistance of institutional support, teacher talents can significantly improve in terms of capabilities, training, and skills.

Similarly, [Nnama-Okechukwu et al. \(2020\)](#) understood the limits and problems alleviated by institutional support for teacher development. The extensive use of methods established institutional support as a moderating factor in the relationship between curriculum development and teacher abilities. New subjects and instructional procedures must be established following teacher experience, or teachers must be improved to accommodate new subjects. It is a professional capability of teacher talents that contributes to constructing a curriculum that is adequately supported by institutional assistance.

H6: *Institutional support significantly moderates the relationship between Teachers' ability and curriculum development.*

Research Methods

The research examines the impact of distance learning, student interest, and teachers' abilities on curriculum development in Jordanian K-12 schools and the moderating effect of institutional support on the relationship between distance learning, student interest, teachers' abilities, and curriculum development. The researchers gathered primary data using questionnaires. The study surveyed teachers in Jordan's K2 schools.

These respondents were chosen by a process known as "simple random sampling." The present researchers gathered data from selected teachers through "personal visits." The researchers mailed 515 surveys to the selected respondents, but only 292 questionnaires were received after a few days, suggesting a response rate of approximately 56.70 per cent. This article used curriculum development (CD) as the dependent variable, with six items drawn from Akhmetshin et al. (2019).

Additionally, the current study included institution support (IS) as a moderating variable, utilising five items from Ahsan et al. (2021). Finally, the current article has extracted three predictors from Bo's article, including distance learning (DL) with six factors, student interest (SI) with eight items, and teachers' abilities (TA) with five items (2021). These structures are depicted in Figure 2 as a framework.

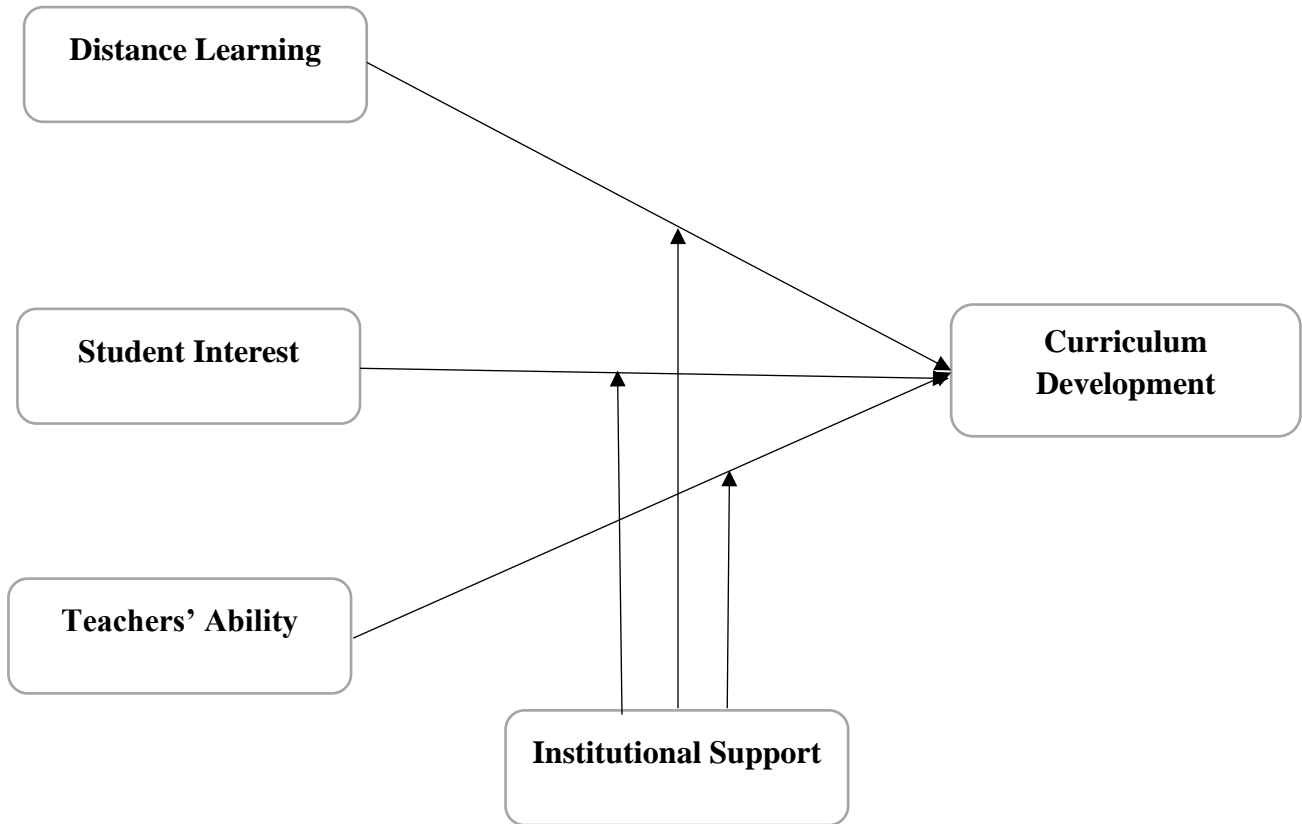


Figure 2: Theoretical model

Additionally, the current research utilised the smart-PLS statistical tool to assess the variables' reliability and validity and the nexus between variables. This method produced the best results even when researchers utilised complex models or big sample sizes (Hair Jr et al., 2021). This tool investigated the "measuring model" to determine reliability and item validity variables. Additionally, this tool examines the "structural model" to determine the relationship between variables. The results section of the paper includes an analysis of both models.

Research Findings

The results have shown the "convergent validity" that show the association between items. The current study has used "average variance extracted (AVE), factor loadings, composite reliability (CR) and Alpha" to test the "convergent validity". The findings indicated that "AVE and factor loadings" figures are not lower than 0.50, and "CR and Alpha" values are not smaller than 0.70. These figures exposed high association among items and valid "convergent validity". The results related to the "convergent validity" are given in Table 1.

Table 1: *Convergent validity*

<i>Constructs</i>	<i>Items</i>	<i>Loadings</i>	<i>Alpha</i>	<i>CR</i>	<i>AVE</i>
Curriculum Development	CD2	0.821	0.827	0.879	0.594
	CD3	0.817			
	CD4	0.842			
	CD5	0.652			
	CD6	0.702			
	Distance Learning	DL1			
DL2		0.853			
DL3		0.705			
DL4		0.760			
DL5		0.837			
DL6		0.853			
Institutional Support	IS1	0.937	0.944	0.958	0.820
	IS2	0.857			
	IS3	0.935			
	IS4	0.938			
	IS5	0.856			
Student Interest	SI1	0.921	0.978	0.981	0.865
	SI2	0.942			
	SI3	0.930			
	SI4	0.931			
	SI5	0.939			
	SI6	0.926			
	SI7	0.928			
	SI8	0.924			
Teachers' Ability	TA1	0.865	0.899	0.929	0.766
	TA2	0.876			
	TA4	0.882			
	TA5	0.880			

The results have shown the “discriminant validity” that show the association between variables. The current study has used “Heterotrait Monotrait (HTMT) ratio, cross-loadings and Fornell Larcker” to test the “discriminant validity”. Firstly, the “Fornell Larcker” were used, and figures indicated that the first value is greater than the rest. These figures exposed low association among variables and valid “discriminant validity”. The results related to the “Fornell Larcker” are given in [Table 2](#).

Table 2: *Fornell Larcker*

	<i>CD</i>	<i>DL</i>	<i>IS</i>	<i>SI</i>	<i>TA</i>
CD	0.771				
DL	0.513	0.809			
IS	0.498	0.725	0.905		
SI	0.502	0.494	0.502	0.930	
TA	0.381	0.422	0.380	0.408	0.875

Secondly, the “cross-loadings” were also used for the examination of “discriminant validity”, and figures indicated that the “cross-loadings” values of the variable itself are more significant than the values of other variables. These figures exposed low association among variables and valid “discriminant validity”. The results related to the “cross-loadings” are given in [Table 3](#).

Table 3: *Cross-loadings*

	<i>CD</i>	<i>DL</i>	<i>IS</i>	<i>SI</i>	<i>TA</i>
CD2	0.821	0.455	0.491	0.398	0.327
CD3	0.817	0.460	0.450	0.430	0.359
CD4	0.842	0.447	0.389	0.404	0.319
CD5	0.652	0.305	0.285	0.359	0.185
CD6	0.702	0.261	0.248	0.338	0.242
DL1	0.409	0.836	0.662	0.386	0.330
DL2	0.449	0.853	0.732	0.451	0.351
DL3	0.391	0.705	0.541	0.315	0.329
DL4	0.380	0.760	0.670	0.398	0.348
DL5	0.406	0.837	0.661	0.379	0.332
DL6	0.450	0.853	0.726	0.456	0.360
IS1	0.455	0.765	0.937	0.460	0.322
IS2	0.451	0.719	0.857	0.442	0.373
IS3	0.456	0.758	0.935	0.463	0.324
IS4	0.443	0.773	0.938	0.462	0.324
IS5	0.446	0.717	0.856	0.444	0.374
SI1	0.446	0.455	0.467	0.921	0.380
SI2	0.467	0.471	0.461	0.942	0.400
SI3	0.448	0.475	0.454	0.930	0.407
SI4	0.459	0.462	0.475	0.931	0.376
SI5	0.468	0.468	0.466	0.939	0.396
SI6	0.495	0.446	0.473	0.926	0.354
SI7	0.458	0.455	0.471	0.928	0.376
SI8	0.492	0.444	0.469	0.924	0.351
TA1	0.323	0.309	0.299	0.350	0.865
TA2	0.328	0.389	0.347	0.354	0.876
TA4	0.309	0.373	0.312	0.345	0.882
TA5	0.368	0.403	0.365	0.376	0.880

Finally, the “HTMT ratio” was used to examine “discriminant validity”, and the findings exposed that the values are not higher than 0.90. These figures revealed low association among variables and valid “discriminant validity”. The results related to the “HTMT ratio” are given in [Table 4](#).

Table 4: *Heterotrait Monotrait ratio*

	<i>CD</i>	<i>DL</i>	<i>IS</i>	<i>SI</i>	<i>TA</i>
CD					
DL	0.582				
IS	0.548	0.797			
SI	0.557	0.527	0.522		
TA	0.430	0.471	0.410	0.435	

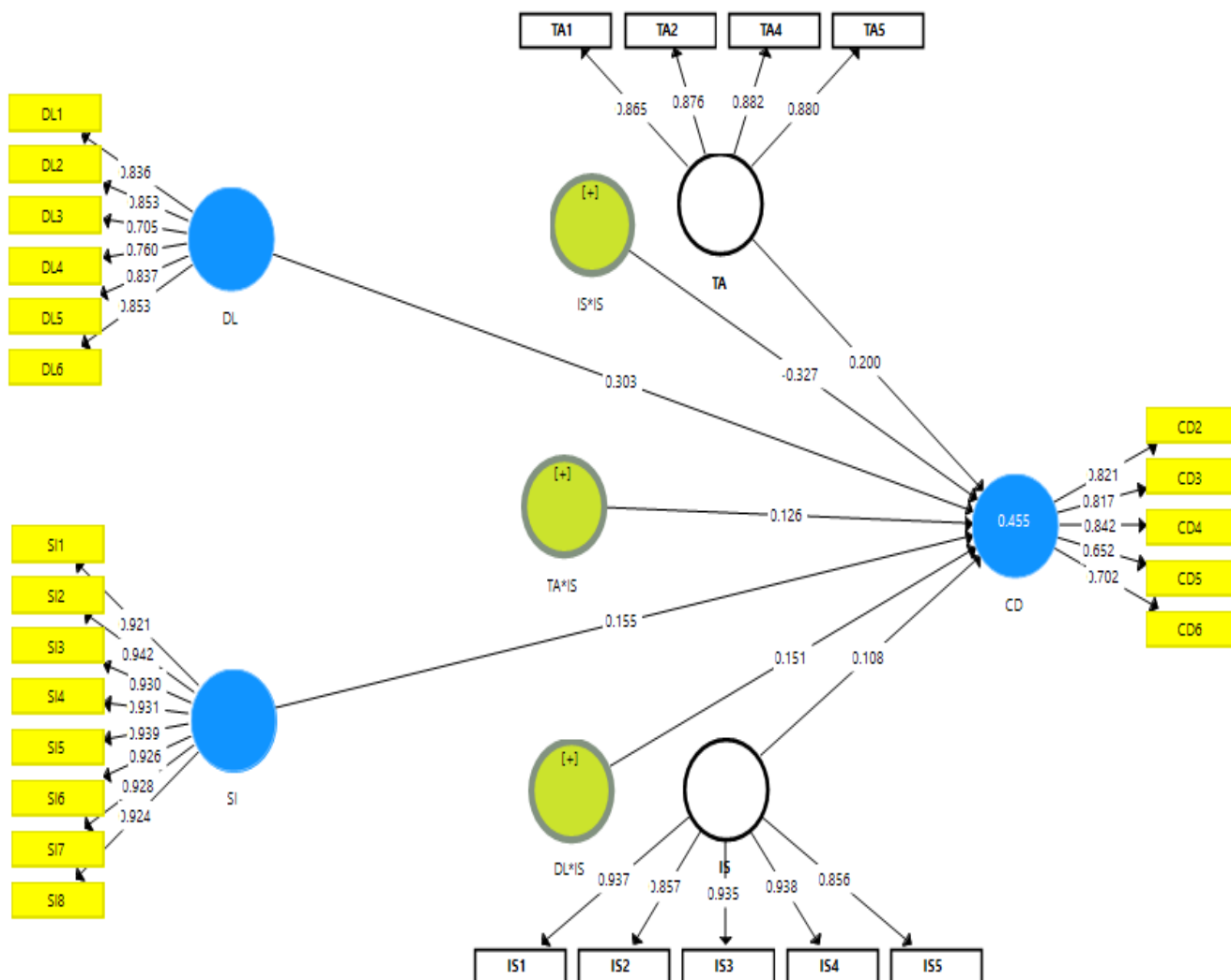


Figure 3: Measurement model assessment

The path analysis revealed a positive relationship between distance learning, student engagement, and teachers' abilities and acceptance of H1, H2, and H3. The results indicated that a 1% increase in DL results in a 0.303 % rise in CD and vice versa. Additionally, the data demonstrated that a 1% increase in SI results in a 0.155 per cent increase in CD, and vice versa. Finally, the data demonstrated that a 1% increase in TA results in a 0.200% increase in CD, and vice versa. Additionally, the results demonstrated that institutional support strongly moderates the relationship between distance learning, student motivation, teacher abilities, and curriculum development in Jordanian K-12 schools, accepting H4, H5, and H6.

Table 5: A path analysis

Relationships	Beta	S.D.	T Statistics	P Values	L.L.	U.L.
DL -> CD	0.303	0.085	3.586	0.000	0.185	0.451
DL*IS -> CD	0.151	0.085	1.769	0.040	0.003	0.287
IS*IS -> CD	-0.327	0.059	5.516	0.000	-0.425	-0.230
SI -> CD	0.155	0.072	2.155	0.017	0.050	0.293
TA -> CD	0.200	0.074	2.715	0.004	0.065	0.302
TA*IS -> CD	0.126	0.070	1.806	0.037	0.008	0.249

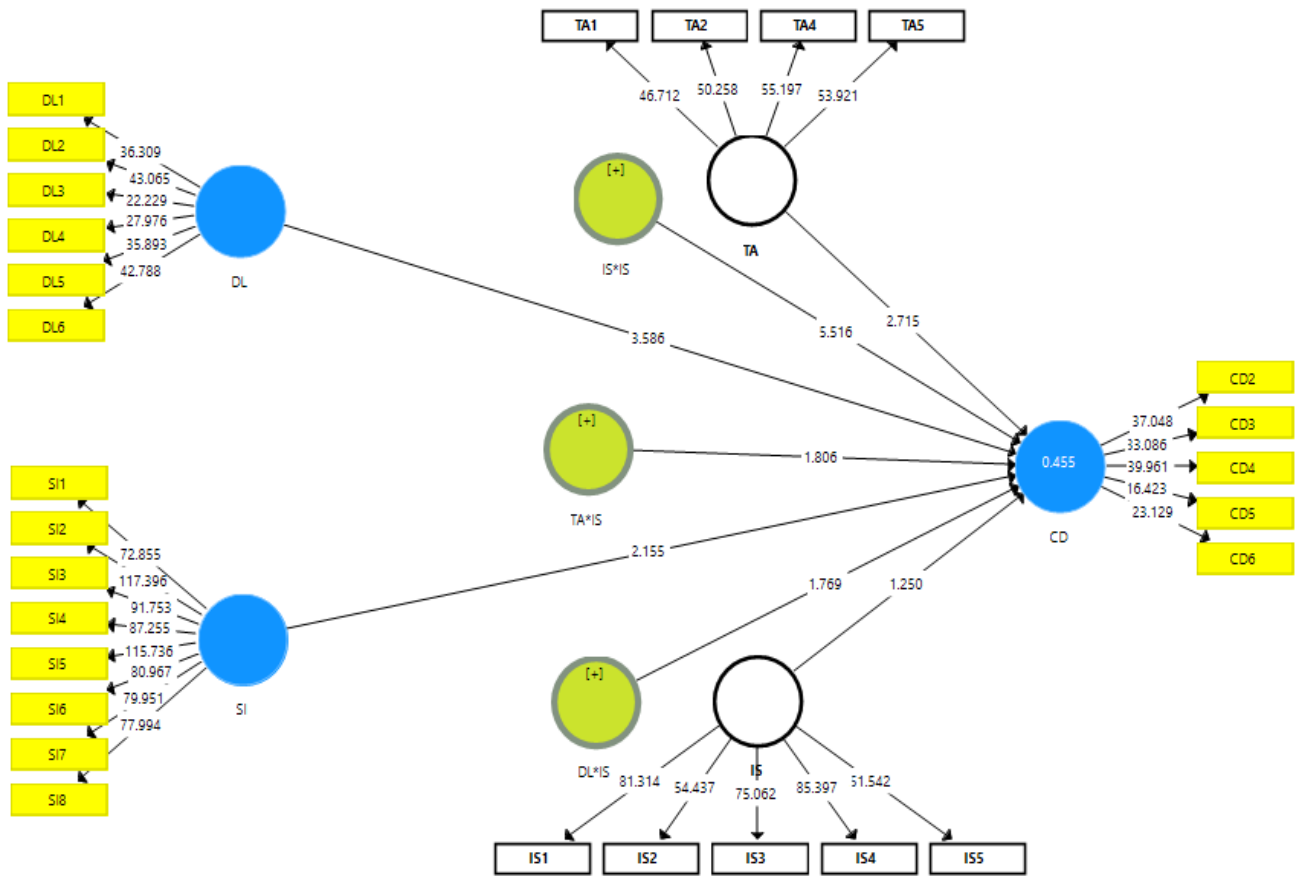


Figure 4: Structural model assessment

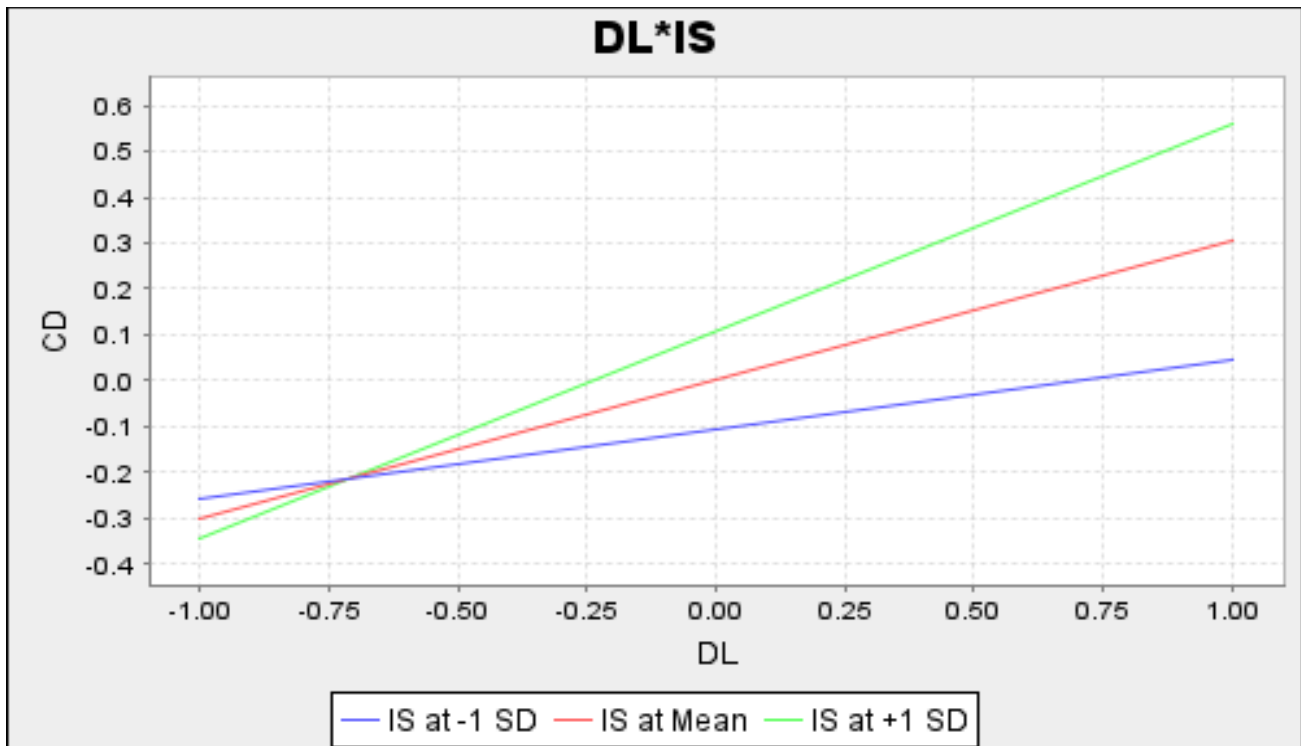


Figure 5: DL*IS

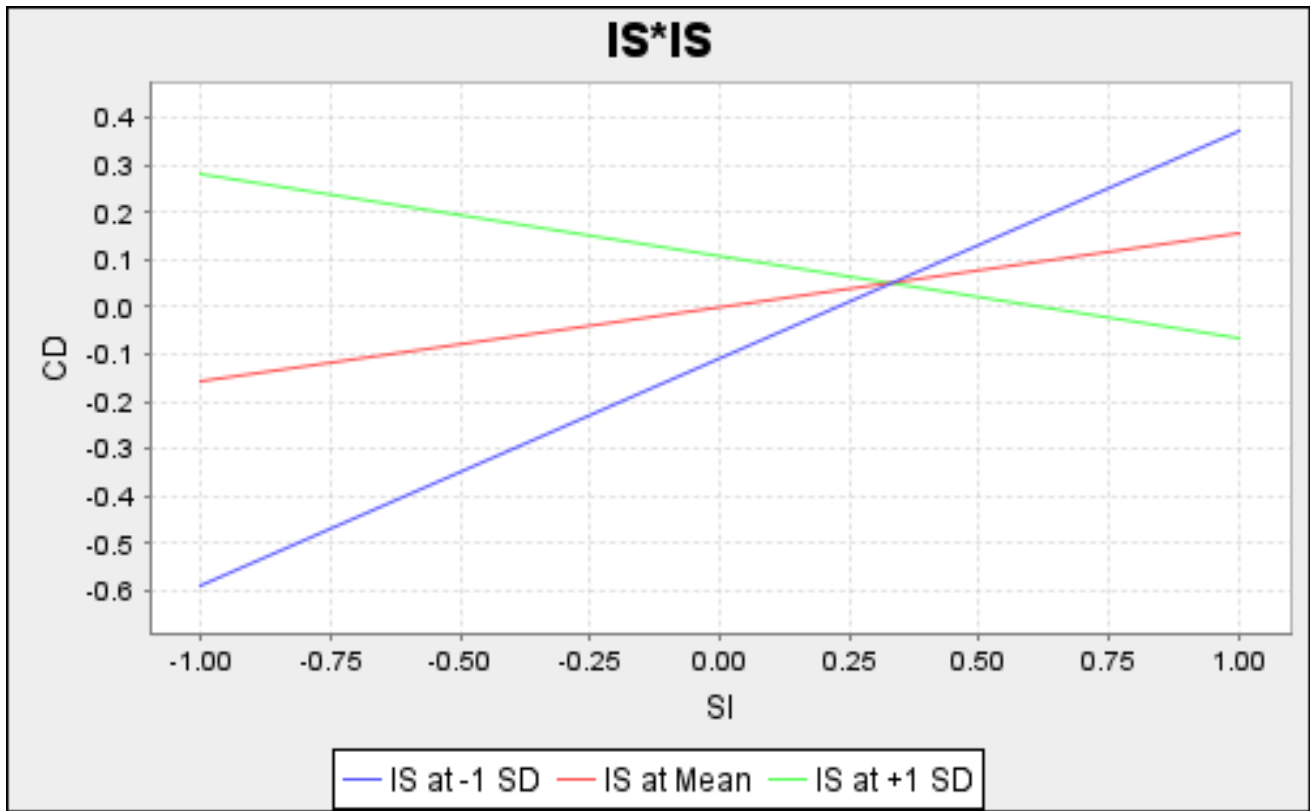


Figure 6: *SI*IS*

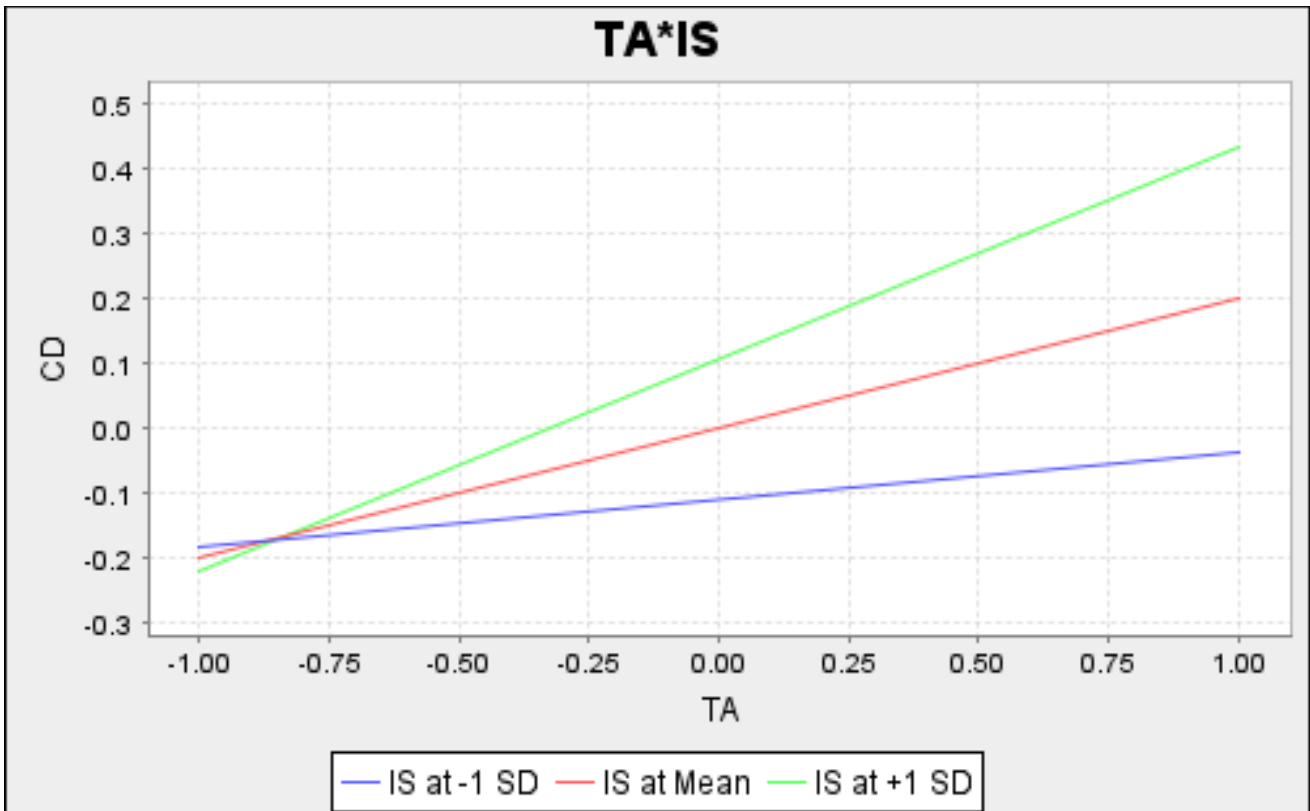


Figure 7: *TA*IS*

Discussions

The findings suggested that distant education had a beneficial effect on curriculum development. These findings corroborate [Zuhairi et al. \(2020\)](#) study. This study indicates that the nature of learning or modes of learning has an effect on the content of the curriculum (both in terms of volume and nature), the implementation of the course of study, and the evaluation of the developed and implemented course of study. When educational institutions use distance learning to educate students for any cause or goal, they must successfully create and implement curriculum content with a certain nature and volume. These findings are also consistent with a prior study conducted by [Bojović et al. \(2020\)](#) on curriculum development. This study asserts that distant education enables students to be educated 24 hours a day and is unaffected by changes in local conditions, such as any health or local crises uncovered in the country. Thus, the institution that uses distance learning can implement the curriculum more efficiently and achieve more significant outcomes. The findings suggested a positive relationship between student interest and curricular development. These findings corroborate [Hammond \(2020\)](#) study, which demonstrates that the content and duration of the curriculum are determined by the students who will teach. The level of students' interest and perceptions and the learning field in which they are oriented all influence the nature of the course's content, its volume, and the completion and evaluation of the curriculum's implementation. When students demonstrate a high level of interest and motivation in their chosen profession, it becomes easier for management and tutors to effectively confirm and improve the class curriculum. These findings also corroborate [Gonzalez et al. \(2019\)](#) previous study. The study found that when institutional education management evaluates students' perceptions, their involvement in the learning process, and their engagement in class when the curriculum's content is delivered, they can ascertain students' interest in the given curriculum and develop it accordingly. The findings indicated that instructors' skill positively correlates with curriculum development. These findings corroborate the findings of [Echols et al. \(2018\)](#), who assert that instructors play a critical role in planning, designing, content and method development, implementation, and evaluation. Teachers' talents in comprehension, knowledge, analysis, motivation, and discipline impact all phases of the curriculum. When teachers have extensive and current knowledge and understanding of the subject matter covered in each class, they may build a successful curriculum, while their motivation and discipline assist them in implementing the curriculum.

The findings suggested that institutional support has a moderating role in the relationship between remote education and curriculum development. These findings are corroborated by a previous study conducted by [Lister et al. \(2021\)](#), demonstrating that efficient distance learning requires students and tutors to access distance learning necessities such as devices, the internet, and specialised software. When an institution supports students and faculty, distant learning can be implemented more effectively. Additionally, institutional support for employees responsible for curriculum creation helps curriculum development from design to evaluation. Thus, institutional support for distance learning and curriculum creation improves the link. These findings corroborate [Wotto \(2020\)](#) prior research, which indicates that an organization's supportive approach toward operational employees, teaching staff, and students significantly improve remote learning implementation and curriculum creation. Thus, distant learning contributes to curriculum development when institutional support is present. The findings indicated that institutional support acted as a moderator between student engagement and curricular development. These findings are corroborated by a previous study conducted by [Sullivan et al. \(2020\)](#), which demonstrated that an institution can pique or maintain students' interest in their class, applied learning methods, and course content through motivational, learning improvement, and training activities.

Similarly, providing support to individuals responsible for curriculum creation at various phases increases curriculum development efficiency. Thus, institutional support facilitates curriculum construction around the students' interests. These findings corroborate [Shin et al. \(2021\)](#) research, which asserts that providing

emotional and cognitive support to students through entertainment-based learning programmes and positive discussions increases students' interest in learning the curriculum, while providing institutional support to management and teaching staff improves curriculum development. Thus, when institutional support is present, distant learning contributes to curriculum development. The findings suggested that institutional support mediates the relationship between teachers' skill and curriculum development. These findings are corroborated by a previous study conducted by Grigal et al. (2019). The findings reveal that institutions dedicated to improving teaching faculty outcomes implement programmes such as teacher learning, training, and performance evaluation to develop teachers' abilities to perform their teaching functions effectively. They receive training on developing and implementing curricula effectively through institutional support. In this case, the teachers' abilities contribute to enhancing curriculum development.

Implications

The current work examines both theoretical and empirical implications. The authors contribute significantly to the literature on educational growth through their recent research administration. As a critical component of an educational context, Curriculum development is the focus of the research. This study explores the effects of remote learning on curriculum creation and the effects of student engagement and teachers' abilities. While distance learning, student motivation, and teacher capability all contribute to the educational environment, three distinct notions might influence curriculum development. Separate research articles have been written to discuss the impact of these elements on curriculum creation. The current study distinguishes itself by examining the effect of all these variables on curriculum creation concurrently. The previously conducted research has primarily focused on the direct effects of institutional support on distance learning, student interest, instructor ability, and curriculum creation. The current study contributes to the literature by examining the moderating effects of institutional support on the relationship between distance learning, student engagement, and teachers' ability and curriculum creation. This research serves as a guide for legislators as they draught regulations governing curricular development. The current study is critical for Jordan's education sector and all growing economies in general. This study has a variety of empirical implications. It demonstrates to the government or educational ministry how they should formulate curriculum development policies to promote education throughout the country. It also serves as a reference for institutional management regarding how policies and internal activities related to curriculum development should be designed. This study demonstrates how curriculum development can be enhanced by efficiently applying distance learning, generating student enthusiasm, and improving teachers' abilities.

Conclusions & Limitations

The purpose of this study was to determine the extent to which distance learning, student interest, and teacher ability influences curriculum development and the role of institutional support in the relationship between distance learning, student interest, teacher ability and curriculum development. The authors organised for an investigation of distance learning, student engagement, instructor ability, institutional support, curriculum development in Jordanian K-12 schools, and their relationships among themselves. A quantitative research technique was used for this goal, and questionnaires were created for analysis. Considering this study, the results indicate a positive relationship between remote learning, student interest, instructor ability, and curriculum development. Distance learning eliminates the time, space, and financial barriers to education while also improving the quality of education; thus, it aids the institution in curriculum development.

Similarly, the recognition and growth of students' interest in the relevant field and in learning something enable the institution to implement all the curriculum development processes effectively. Similarly, strengthening

teachers' qualities such as comprehension, knowledge, analytical skills, motivation, and discipline enables pupils to perform well throughout the curriculum development process. The findings indicated that institutions have a supportive attitude toward their employees in distance learning, student interest, teaching competence, and curriculum development.

Despite its numerous theoretical and empirical implications, this study has several drawbacks. These constraints can be overcome by further research. This study explores the influence of only three aspects in curriculum development: learning, student interest, and teachers' competency. Numerous additional elements, such as school management, regional culture, and parental involvement, affect curriculum development. However, the effects of these characteristics were not explored in this investigation, which limited the study's scope. To conduct a more thorough study, aspiring authors must consider these elements in addition to the ones already mentioned for curriculum building. The current analysis is based on Jordan's educational sector data, which has its own set of educational policies. The findings from the Jordanian educational sector are not universal and may not apply to other educational institutions worldwide. It is proposed that future academics research the relationship between remote learning, student engagement, teacher ability, and curriculum creation across diverse educational systems.

References

- Ahsan, M., Adomako, S., & Mole, K. F. (2021). Perceived institutional support and small venture performance: The mediating role of entrepreneurial persistence. *International Small Business Journal*, 39(1), 18-39. <https://doi.org/https://doi.org/10.1177%2F0266242620943194>
- Akhmetshin, E. M., Mueller, J. E., Yumashev, A. V., Kozachek, A. V., Prikhodko, A. N., & Safonova, E. E. (2019). Acquisition of entrepreneurial skills and competences: Curriculum development and evaluation for higher education. *Journal of Entrepreneurship Education*, 22(1), 1-12. <https://dspace.kpfu.ru/xmlui/handle/net/155802>
- Al-Hassan, O. M. (2018). Developments of early childhood education in Jordan. *Early Years*, 38(4), 351-362. <https://doi.org/https://doi.org/10.1080/09575146.2018.1512562>
- Alkhalidi, A. A. (2021). ESL Materials Selection: Key Principles and Suggestions. *Educational Sciences: Theory & Practice*, 21(3), 12-26. <https://jestp.com/index.php/estp/article/view/1459/801>
- Aristeidou, M., & Cross, S. (2021). Disrupted distance learning: the impact of Covid-19 on study habits of distance learning university students. *Open Learning: The Journal of Open, Distance and e-Learning*, 36(3), 263-282. <https://doi.org/https://doi.org/10.1080/02680513.2021.1973400>
- Bell, S., Douce, C., Caeiro, S., Teixeira, A., Martín-Aranda, R., & Otto, D. (2017). Sustainability and distance learning: a diverse European experience? *Open Learning: The Journal of Open, Distance and e-Learning*, 32(2), 95-102. <https://doi.org/https://doi.org/10.1080/02680513.2017.1319638>
- Bens, S., Kolomitro, K., & Han, A. (2021). Curriculum development: enabling and limiting factors. *International Journal for Academic Development*, 26(4), 481-485. <https://doi.org/https://doi.org/10.1080/1360144X.2020.1842744>
- Bojović, Ž., Bojović, P. D., Vujošević, D., & Šuh, J. (2020). Education in times of crisis: Rapid transition to distance learning. *Computer Applications in Engineering Education*, 28(6), 1467-1489. <https://doi.org/https://doi.org/10.1002/cae.22318>
- Bursali, N., & Misir, H. (2021). Uncovering emerging identity performances of Turkish foreign language teaching assistants. *Eurasian Journal of Applied Linguistics*, 7(1), 45-67. <https://ejal.info/index.php/wp-content/uploads/2021/06/10.32601-ejal.911161-1690422.pdf>
- Chinnery, J. (2019). Jordan: education policy in transition. *Forced Migration Review*(60), 19-21. <https://www.ecoi.net/en/file/local/2009381/chinnery.pdf>
- Dash, B. M. (2018). Social work education through open and distance learning in India: opportunities and challenges. *Social Work Education*, 37(6), 813-820. <https://doi.org/https://doi.org/10.1080/02615479.2018.1481204>

- Dieu, P. F. (2021). Gendarmerie et militarité : une approche sociologique. *Res Militaris*, 11(2), 1-10. https://resmilitaris.net/wp-content/uploads/2022/01/Res-Militaris_11_2_5.pdf
- Douce, C. (2021). Editorial: Distance learning and language learning. *Open Learning: The Journal of Open, Distance and e-Learning*, 36(1), 2-4. <https://doi.org/https://doi.org/10.1080/02680513.2020.1863204>
- Echols, D. G., Neely, P. W., & Dusick, D. (2018). Understanding faculty training in competency-based curriculum development. *The Journal of Competency-Based Education*, 3(2), e01162. <https://doi.org/https://doi.org/10.1002/cbe2.1162>
- Garraway, J. (2017). Future-orientated approaches to curriculum development: fictive scripting. *Higher Education Research & Development*, 36(1), 102-115. <https://doi.org/https://doi.org/10.1080/07294360.2016.1170765>
- Giraldo-García, R. J., Galletta, A., & Bagaka's, J. G. (2019). The intersection of culture and institutional support for Latino students' academic success: Remediation or empowerment? *Journal of Latinos and Education*, 18(1), 68-80. <https://doi.org/https://doi.org/10.1080/15348431.2018.1426464>
- Gonzalez, C. M., Deno, M. L., Kintzer, E., Marantz, P. R., Lyson, M. L., & McKee, M. D. (2019). A qualitative study of New York medical student views on implicit bias instruction: implications for curriculum development. *Journal of general internal medicine*, 34(5), 692-698. <https://doi.org/https://doi.org/10.1007/s11606-019-04891-1>
- Gorski, P. C., & Parekh, G. (2020). Supporting Critical Multicultural Teacher Educators: Transformative teaching, social justice education, and perceptions of institutional support. *Intercultural education*, 31(3), 265-285. <https://doi.org/https://doi.org/10.1080/14675986.2020.1728497>
- Grigal, M., Cooney, L., & Hart, D. (2019). Promoting college and career readiness with middle school youth with disabilities: Lessons learned from a curriculum development project. *Career Development and Transition for Exceptional Individuals*, 42(1), 64-71. <https://doi.org/https://doi.org/10.1177%2F2165143418814246>
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*. Springer Nature. <https://library.oapen.org/handle/20.500.12657/51463>
- Hairon, S., Chua, C. S. K., & Neo, W. L. (2018). School-based curriculum development in Singapore: a case study of a primary school. *Asia Pacific Journal of Education*, 38(4), 518-532. <https://doi.org/https://doi.org/10.1080/02188791.2018.1530192>
- Hammond, R. W. (2020). Sales student preconceptions and a novel approach to sales curriculum mapping: Insights, implications, and application for sales educators. *Journal of Marketing Education*, 42(3), 304-323. <https://doi.org/https://doi.org/10.1177%2F0273475320925876>
- Igwe, J. N., Ugwuanyi, C. S., Ejimonye, J. C., Odionye, N., Metu, I. C., Enebechi, R. I., Eze, K. O., Ikeh, F. E., Okeke, A. O., & Nnnadi, E. M. (2022). Stress Management Among Science and Social Science Educators Within Open and Distance Learning Centers Using Rational Emotive Behavior Therapy: Implication for Curriculum and Educational Evaluators. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 1-22. <https://doi.org/https://doi.org/10.1007/s10942-021-00430-2>
- Istaryaningtyas, I., Silviana, L., & Hidayat, E. (2021). Management of the Independent Learning Curriculum during the Covid-19 Pandemic. *Journal of Education Research and Evaluation*, 5(2), 176-184. <https://doi.org/http://dx.doi.org/10.23887/jere.v5i2.32998>
- Iwuanyanwu, P. N., & Ogunniyi, M. B. (2020). Effects of dialogical argumentation instructional model on pre-service teachers' ability to solve conceptual mathematical problems in physics. *African Journal of Research in Mathematics, Science and Technology Education*, 24(1), 129-141. <https://doi.org/https://doi.org/10.1080/18117295.2020.1748325>
- Kanbul, S., Zaitseva, N., Ikonnikov, A., Kalugina, O., Savina, T., & Evgrafova, O. (2020). Determining expert opinions of the faculty of education on the development of distance learning course. *International Journal of Emerging Technologies in Learning (iJET)*, 15(23), 52-62. <https://www.learntechlib.org/p/218468/>

- Kiraci, A., & Canan, S. (2021). Econometric Analysis of Effective Socio-Economic and Educational Variables in Migration. *Eurasian Journal of Educational Research*(91), 21-37. <https://ejer.com.tr/wp-content/uploads/2021/01/ejer.2020.90.2.pdf>
- Lister, K., Pearson, V. K., Collins, T. D., & Davies, G. J. (2021). Evaluating inclusion in distance learning: a survey of university staff attitudes, practices and training needs. *Innovation: The European Journal of Social Science Research*, 34(3), 321-339. <https://doi.org/https://doi.org/10.1080/13511610.2020.1828048>
- Lubiński, K., & Tama, D. K. (2021). The observed effects of distance learning on curriculum implementation in management and business studies. *Procedia Computer Science*, 192, 2540-2549. <https://doi.org/https://doi.org/10.1016/j.procs.2021.09.023>
- Lustyantie, N., & Kasan, R. A. (2021). Improving Reading Comprehension in EFL situation: A Correlation Analysis. *Educational Sciences: Theory & Practice*, 21(1), 131-139. <https://jestp.com/index.php/estp/article/view/1272/787>
- Lytzerinou, E., & Iordanou, K. (2020). Teachers' ability to construct arguments, but not their perceived self-efficacy of teaching, predicts their ability to evaluate arguments. *International Journal of Science Education*, 42(4), 617-634. <https://doi.org/https://doi.org/10.1080/09500693.2020.1722864>
- Mazur, J. (2021). Informacja i dezinformacja w przestrzeni publicznej. *socialspacejournal.eu*, 21(1), 69-95. <https://socialspacejournal.eu/wp-content/uploads/2021/12/Social-Space-Journal-1202121.pdf>
- Missenden, N., & Campbell, M. (2019). Secondary school teachers' ability to recognise and refer students with differing levels of anxiety. *The Educational and Developmental Psychologist*, 36(2), 51-59. <https://doi.org/https://doi.org/10.1017/edp.2019.12>
- Nguyen, T.-H., Pham, X.-L., & TU, N. T. T. (2021). The Impact of Design Thinking on Problem Solving and Teamwork Mindset in A Flipped Classroom. *Eurasian Journal of Educational Research*(96), 30-50. <http://ejer.info/index.php/journal/article/view/540/47>
- Nnama-Okechukwu, C. U., Chukwuka, P., N, & Okoye, U., O. (2020). Challenges with Institutional Support Services for Undergraduate Students with Visual Impairment in University of Nigeria Nsukka. *Journal of Evidence-Based Social Work*, 17(6), 677-695. <https://doi.org/https://doi.org/10.1080/26408066.2020.1787288>
- Roberts, J., Kigotho, M., & Stagg, A. (2018). Expanding Horizons in Open and Distance Learning. *Distance Education*, 39(1), 1-3. <https://doi.org/https://doi.org/10.1080/01587919.2018.1439367>
- Roland, E. (2021). Institutional Support and Black Women Resident Assistants across Environments. *Journal of Student Affairs Research and Practice*, 58(5), 507-519. <https://doi.org/https://doi.org/10.1080/19496591.2021.1910043>
- Shin, T. H., Klingler, M., Han, A., Mocsiran, J. L., Vilchez, V., Naples, R., French, J., Lipman, J. M., & Rosenblatt, S. (2021). Efficacy of virtual case-based general surgery clerkship curriculum during COVID-19 distancing. *Medical science educator*, 31(1), 101-108. <https://doi.org/https://doi.org/10.1007/s40670-020-01126-5>
- Soulsby, D., Anna, L., & Wallner, A. (2022). *NMR Spectroscopy in the Undergraduate Curriculum, Volume 4: In-Person and Distance Learning Approaches*. American Chemical Society (ACS). <https://doi.org/https://doi.org/10.1021/bk-2021-1376>
- Sullivan, B. T., DeFoor, M. T., Hwang, B., Flowers, W. J., & Strong, W. (2020). A novel peer-directed curriculum to enhance medical ethics training for medical students: a single-institution experience. *Journal of medical education and curricular development*, 7, 1-10. <https://doi.org/https://doi.org/10.1177%2F2382120519899148>
- Ten Cate, O., Graafmans, L., Posthumus, I., Welink, L., & van Dijk, M. (2018). The EPA-based Utrecht undergraduate clinical curriculum: Development and implementation. *Medical Teacher*, 40(5), 506-513. <https://doi.org/https://doi.org/10.1080/0142159X.2018.1435856>
- Utama, A. H. (2021). The Implementation Curriculum 13 (K-13) in Teacher's Ability to Develop Learning Media at Distance Learning. *Indonesian Journal of Instructional Media and Model*, 3(2), 56-65. <https://doi.org/https://doi.org/10.32585/ijimm.v3i2.1705>

- Weiland, T., Orrill, C. H., Brown, R. E., & Nagar, G. G. (2019). Mathematics teachers' ability to identify situations appropriate for proportional reasoning. *Research in Mathematics Education*, 21(3), 233-250. <https://doi.org/https://doi.org/10.1080/14794802.2019.1579668>
- Wotto, M. (2020). The future high education distance learning in Canada, the United States, and France: Insights from before COVID-19 secondary data analysis. *Journal of Educational Technology Systems*, 49(2), 262-281. <https://doi.org/https://doi.org/10.1177%2F0047239520940624>
- Xiu, X., & Ibrahim, N. M. B. (2021). Role of Learner Autonomy and Students' Perception in Legitimizing China English as A Variety of English. *Eurasian Journal of Applied Linguistics*, 7(2), 31-45. <https://ejal.info/menuscrypt/index.php/ejal/article/view/41/5>
- Zuhairi, A., Karthikeyan, N., & Priyadarshana, S. T. (2020). Supporting students to succeed in open and distance learning in the Open University of Sri Lanka and Universitas Terbuka Indonesia. *Asian Association of Open Universities Journal*, 15(1), 13-35. <https://doi.org/https://doi.org/10.1108/AAOUJ-09-2019-0038>